

Developing New Testing Methods for Nanosatellites

Completed Technology Project (2011 - 2012)



Project Introduction

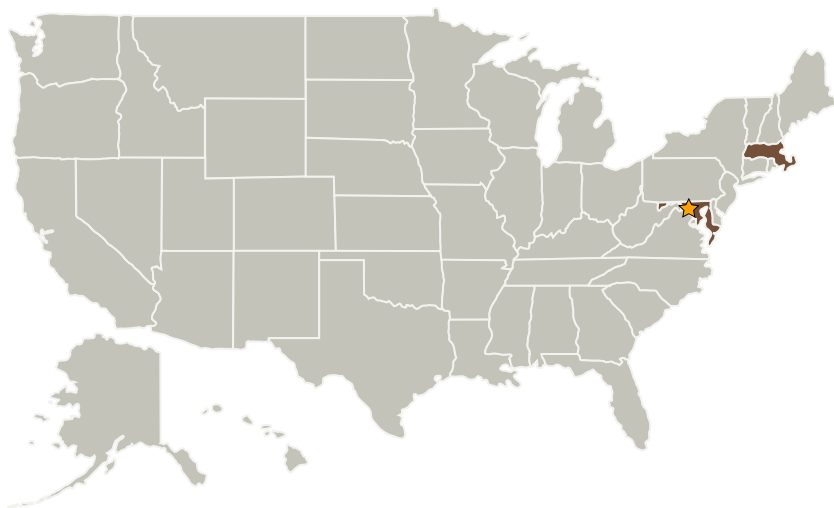
This is a unique nanosatellite designed for astrophysics, and our involvement continues Goddard's leadership in these areas while also helping establish our presence in the field of Exoplanets. Thermal modeling of ExoPlanetSat, a nanosatellite for finding exoplanet transits around nearby sun-like stars Needed for Photometric stability Develop a test plan for ExoPlanetSat Prepare for flight testing in 2012/2013

Thermal modeling and Test plan to be carried out and developed by Goddard Space Flight Center. This project will be done in collaboration with partners at MIT and Draper Laboratory Basic Thermal Model, Oct. 1, 2011; Final Thermal Model, Mar. 1, 2012; Draft Test Plan, Mar. 1, 2012; Final Test Plan, July 1, 2012.

Anticipated Benefits

N/A

Primary U.S. Work Locations and Key Partners



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Organizations Performing Work	Role	Type	Location
★Goddard Space Flight Center(GSFC)	Lead Organization	NASA Center	Greenbelt, Maryland
The Charles Stark Draper Laboratory, Inc.	Supporting Organization	R&D Center	Cambridge, Massachusetts

Primary U.S. Work Locations	
Maryland	Massachusetts

Project Website:<http://sciences.gsfc.nasa.gov/sed/>**Organizational Responsibility****Responsible Mission Directorate:**

Space Technology Mission Directorate (STMD)

Lead Center / Facility:

Goddard Space Flight Center (GSFC)

Responsible Program:

Center Innovation Fund: GSFC CIF

Project Management**Program Director:**

Michael R Lapointe

Program Manager:

Peter M Hughes

Project Manager:

Michael J Amato

Principal Investigator:

Stephen A Rinehart

Co-Investigators:

Jeffrey R Didion

Patrick L Kilroy

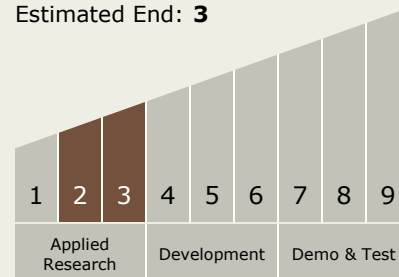
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Technology Maturity (TRL)

Start: **2**
Estimated End: **3**



Technology Areas

Primary:

- TX09 Entry, Descent, and Landing
 - └ TX09.4 Vehicle Systems
 - └ TX09.4.5 Modeling and Simulation for EDL